

UNCLASSIFIED**EXHIBIT R-2, FY 2001 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET****DATE: February 2000****BUDGET ACTIVITY: 5****PROGRAM ELEMENT: 0604221N****PROGRAM ELEMENT TITLE: P-3 Modernization Program****(U) COST: (Dollars in Thousands)**

<u>Project Number & Title</u>	<u>FY 1999 Actual</u>	<u>FY 2000 Budget</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
H1152 P-3 Sensor Integration	2,763	10,950	2,906	3,228	2,377	3,298	3,039	CONT	CONT
TOTAL Quantity of RDT&E Articles	2,763	10,950*	2,906	3,228	2,377	3,298	3,039	CONT	CONT

* FY 00 budget reflects an \$8,000 thousand Congressional add for APS-137 radar upgrades, which has been revised by \$44 thousand for an Across-the-Board Congressional rescission.

(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: This program provides upgrades to P-3C aircraft systems to enhance surface and subsurface tracking and classification; attack capabilities including Specific Emitter Identification (SEI); and improved APS-137 radar tracking and upgrades. The P-3C Sensor Integration project develops software necessary to integrate advanced sensors into embedded P-3C Update III computer systems. Also, P-3 Sensor Integration will expand software development of P-3 systems to integrate additional sensors, tactical decision aids, and color capabilities to improve aircrew tactical proficiency and awareness. Sensor Integration is a continuous effort to integrate and test newly evolving ASW technologies such as the Advanced Explosive Echo Ranging (AEER) system and Shallow Water ASW Localization and Attack System (SWALAS).

(U) JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under Engineering and Manufacturing Development because it encompasses engineering and manufacturing development of new end-items prior to production approval decision.

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EXHIBIT R-2a, FY 2001 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET

DATE: February 2000

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604221N

PROJECT NUMBER: H1152

PROGRAM ELEMENT TITLE: P-3 Modernization Program

PROJECT TITLE: P-3 Sensor Integration

(U) COST: (Dollars in Thousands)

<u>Project Number & Title</u>	<u>FY 1999 Actual</u>	<u>FY 2000 Budget</u>	<u>FY 2001 Estimate</u>	<u>FY 2002 Estimate</u>	<u>FY 2003 Estimate</u>	<u>FY 2004 Estimate</u>	<u>FY 2005 Estimate</u>	<u>To Complete</u>	<u>Total Program</u>
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(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. FY 1999 ACCOMPLISHMENTS:

- (U) (\$ 500) Continued system engineering support for proper integration of Improved Extended Echo Ranging (IEER) system.
- (U) (\$ 1,543) Continued IEER integration and successfully conducted Preliminary Design Review (PDR).
- (U) (\$ 720) Provided Aviation Depot Level Repairable (AVDLR) for P-3 test aircraft.

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PROJECT TITLE: P-3 Sensor Integration

2. FY 2000 PLAN:

(U) (\$ 451) Continue system engineering support for proper integration of Improved Extended Echo Ranging (IEER) system.

(U) (\$1,622) Continue IEER software development, Critical Design Review (CDR), integration and testing.

(U) (\$7,940) Upgrade the APS-137 radar.

(U) (\$ 937) Provide Aviation Depot Level Repairable (AVDLR) for P-3 test aircraft.

3. FY 2001 PLAN:

(U) (\$ 447) Continue system engineering support for proper integration of Improved Extended Echo Ranging (IEER) system.

(U) (\$ 1,709) Continue IEER integration and flight testing.

(U) (\$ 750) Provide Aviation Depot Level Repairable (AVDLR) for P-3 test aircraft.

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PROJECT NUMBER: H1152

PROGRAM ELEMENT TITLE: P-3 Modernization Program

PROJECT TITLE: P-3 Sensor Integration

(U) B. PROGRAM CHANGE SUMMARY

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
(U) FY 2000 President's Budget:	2,828	3,010	3,063
(U) Appropriated Value:	3,046	11,010	
(U) Adjustments from Pres Budget:	-65	+7,940	-157
(U) FY 2001 President's Budget Submit:	2,763	10,950	2,906

CHANGE SUMMARY EXPLANATION:

(U) Funding: The FY 1999 net decrease of \$65 thousand reflects a decrease of \$42 thousand for a SBIR assessment and a decrease of \$23 thousand for inflation savings. The FY 2000 net increase of \$7,940 thousand reflects an increase of \$8,000 thousand for APS-137 radar upgrades and a decrease of \$60 thousand for an Across-the-Board Congressional Recision. The FY 2001 net decrease of \$157 thousand includes a \$98 thousand decrease for Navy Working Capital Fund (NWCF), a \$5 thousand increase for Military and Civilian Pay, a \$20 thousand decrease for revised economic assumptions and a decrease of \$44 thousand for reprioritization of requirements within the Navy.

(U) Schedule: AN/USQ-78 testing delays impacted availability of the software baseline which delayed the FY 1999 IEER PDR from 1Q/99 to 4Q/99 and IEER CDR from 3Q/99 to 2Q/00. In addition, delays in contracting and software development delayed the FY 1999 SEI Initial Operating Capability (IOC) scheduled for 4Q/99 to 3Q/00. The delays also impacted the FY 1999 Radar DT from 4Q/99 to 1Q/00 and SEI DT/OT from 3Q/99 to 2Q/00. Identifies three events for APS-137 radar upgrade; a Congressional add.

(U) Technical:

(U) C. OTHER PROGRAM FUNDING SUMMARY

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To</u>
<u>Appn</u>	<u>Actual</u>	<u>Budget</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>
None.								

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PROJECT TITLE: P-3 Sensor Integration

Related RDT&E

(U) P.E. 0606261N (Acoustic Search Sensors developing software and acoustic algorithms).

(U) D. ACQUISITION STRATEGY: The Air Deployable Active Receiver/Improved Extended Echo Ranging (IEER) Operational Requirements Document (Ser# 297(1)-05-97)) for H1152 was approved on 29 December 1997. The P-3 ASUW Improvement Program (AIP) ORD (Ser# 355-88-94) for H2417 was approved on 30 March 1994. The Acquisition Plan (AIR-93-08A Rev 2) was approved on 30 March 1998.

(U) E. SCHEDULE PROFILE

	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>TO COMPLETE</u>
(U) Program Milestones		1Q/00 Radar IOC 3Q/00 SEI IOC	1Q/01 Radar Upgrade IOC	
(U) Engineering Milestones	4Q/99 IEER PDR	2Q/00 IEER CDR 3Q/00 IEER I&T	4Q/00 Radar Upgrade I&T	
(U) T&E Milestones		1Q/00 Radar DT 2Q/00 SEI DT	1Q/01-2Q/01 IEER DTIII 3Q/01-4Q/01 IEER OTIII	
(U) Contract Milestones		Radar Upgrade Contract Award 2Q/00		

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EXHIBIT R-3, FY 2001 RDT&E,N COST ANALYSIS

DATE: February 2000

BUDGET ACTIVITY: 5

PROGRAM ELEMENT: 0604221N

PROJECT NUMBER: H1152

PROJECT TITLE: P-3 Sensor Integration

<u>Cost Categories:</u>	<u>Contract Method & Type</u>	<u>Performing Activity & Location</u>	<u>Total Prior Yrs Cost</u>	<u>FY 1999 Cost</u>	<u>FY 1999 Award Date</u>	<u>FY 2000 Cost</u>	<u>FY 2000 Award Date</u>	<u>FY 2001 Cost</u>	<u>FY 2001 Award Date</u>	<u>Cost to Complete</u>	<u>Total Cost</u>	<u>Target Value of Contract</u>
Subtotal Product Development			0	0		0		0		0	0	
Remarks:												
Technical Support (CS)	C/FFP	RBC, VA	2,665	500	Nov 98	451	Jan 00	447	Dec 00	CONT	CONT	CONT
Systems Engineering (Radar Upgrade).	C/FF	Raytheon McKinney, TX				2,227	Mar 00				2,227	2,227
Software Development (Radar Upgrade)	C/FF	Raytheon				3,715	Mar 00				3,715	3,715
IINT/System Test (Radar Upgrade)	C/FF	Raytheon				1,998	Mar 00				1,998	1,998
Systems Engineering Support	Various	Various	23,815	940	Nov 98	1,122	Feb 00	1,105	Nov 00	CONT	CONT	CONT
Systems Engineering Support	SS	LMTDS/ Eagan, MN	14,561								14,561	14,561
Systems Engineering Support	C/FFP	Raytheon	2,432								2,432	2,432
Systems Engineering Support	WX	NAWC Pax River, MD		603	Nov 98	500	Feb 00	604	Dec 00	CONT	CONT	
Subtotal Support			43,473	2,043		10,013		2,156		CONT	CONT	
Remarks:												
Test and Evaluation	WX	NAWC Pax River, MD	3,915	720	Nov 98	937	Feb 00	750	Dec 00	CONT	CONT	
Subtotal Test & Evaluation			3,915	720		937		750		CONT	CONT	
Remarks:												
Subtotal Management			0	0		0				0	0	0
Remarks:												
Total Cost			47388	2763		10950		2906		CONT	CONT	

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